



# **Lepidoptera in Cheshire in 2000**

**A Report on the Micro-Moths,  
Butterflies and Macro-Moths of VC58**

and a first update on the Cheshire Lepidoptera Atlas Project

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## 1. Introduction

Welcome to the 2000 report on lepidoptera in VC58 (Cheshire). Observers are probably more used to seeing separate reports on micro-moths, macro-moths and butterflies, rather than seeing all three reports combined into one. However, with plans underway for an 'Atlas of Lepidoptera in VC58' (see section 5) which will cover all three groups the time seems right for a combined report. Doubtless observers will turn first to the group they are most interested in, but please take the time to read the other sections. Hopefully you will find something of interest. Note that for this first combined report slightly different recording areas have been used with the two moth reports covering records from VC58 while the butterfly section covers the current county of Cheshire. For the 2001 report we hope to standardise on VC58.

**Many thanks to all recorders who have already submitted records for 2000. Without your efforts this report would not be possible.**

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## 2. Micro-Moths

Several members of the Lancashire and Cheshire Entomological Society (LCES) spent the night of 26-27<sup>th</sup> June 1999 at Inner Marsh Farm, Burton SJ307741, courtesy of the RSPB. It was clear and sunny in the early evening as I left home, travelling west along the M56. Half way across the Cheshire Plain, I ran into a slow moving front. There was complete cloud cover all the rest of the way to the Wirral. Conditions appeared ideal for running light traps. Just as we were setting up the traps, we felt the first drops of rain and heavy intermittent showers continued throughout the night. Fortunately, the temperature remained high and the lights attracted a diverse selection of species. Amongst which, were three new county records: *Coleophora adjunctella* Hodgk.; *C. adpersella* Bernander and *Cydia fagiglandana* (Zell.). *C. adjunctella* is apparently common around the English and Welsh coasts, frequenting the upper parts of salt-marshes, where its larva feeds on the seeds of Saltmarsh Rush *Juncus gerardii*. *C. adpersella* also occurs on salt-marshes, although feeding on a range of oraches *Atriplex* spp., can just as frequently be encountered inland. This is the most northerly record from the western side of the country. A couple of records from the east during 1997, at Spurn (B.R.Spence), were also new to Yorkshire, possibly indicating a northerly movement in the species range. *Cydia fagiglandana* also appears to be spreading north. The first Yorkshire (VC63) records being from Rotherham on 9<sup>th</sup> July 1996 (H.E.Beaumont), followed by South Lancashire (VC59) at Pennington SJ6598 on 28<sup>th</sup> May 1999 (P.Cleary-Pugh); West Lancashire (VC60) at Gait Barrows NNR SD4877 on 10<sup>th</sup> July 1999 (R.Petley-Jones) and Derbyshire (VC57) at Chee Dale SK134733 on 17<sup>th</sup> July 1999 (S.H.Hind). Although there is a single 1989 record as far north as Kirkinner, Wigtownshire (E.F.Hancock); this was previously thought to be restricted to the south of the country, where it can be common amongst Beech *Fagus sylvatica*.

Also taken at the same time was the second county record of *Eucosma pupillana* (Cl.). This species feeds in the roots of Wormwood *Artemisia absinthium* and has only previously been found at Bebington, July 1955 (R.Prichard).

Several adults of *Apodia bifractella* (Dup.) were found on the flowers of Common Fleabane *Pulicaria dysenterica* at Rixton Clay Pits SJ685906 in early evening sunshine on 19<sup>th</sup> August 1998 (SHH; E. Kearns; K.McCabe; B.T.Shaw). They were quite variable in their markings, most being a drab dark brown, although a few possess subtle mixtures of orange, white and grey. The larvae feed on the seeds of Common Fleabane throughout the winter and pupate in the seed-head the following spring. A number of seed-heads were collected from a field near Marple Locks SJ960894. on 27<sup>th</sup> December 1998, from which several adults emerged the following June. (D.J.Poynton; I.F.Smith). IFS also collected seed-heads from plants growing in his Mellor garden SJ969886 on 7<sup>th</sup> March 1999, which again produced adult moths the following June and 77 adults emerged in July 2000 from seed-heads collected on 21<sup>st</sup> April 2000 in the Wych Valley SJ472446 (DJP;IFS). These appear to be the first records for VC's 59, 58 & 57. The first Yorkshire record (VC63) was only 1994 when adults were bred from another of its foodplants, Ploughman's Spikenard *Inula conyza* at Potteric Carr, Doncaster (R.I.Heppenstall). The only West Lancashire record (VC60) was to light at Lightfoot Green, Preston SD5133 on 13<sup>th</sup> August 1996 (S.M.Palmer). These records may indicate that the species has only recently moved north into our area. I would suspect that it may well now occur throughout Cheshire and would ask everyone to look on the flowers of its foodplants, which also include Sea Aster *Aster tripolium*, during July & August, so that we can determine its status in the county.

Another species that has only recently spread into the area is *Ptycholomoides aeriferanus* (H.-S.). My first encounter with this moth was whilst attending lights in a garden at Low Leighton, just across the Derbyshire county boundary SK013853, which were being operated by the New Mills Natural History Society on 16<sup>th</sup> August 1996. The first Derbyshire (VC57) record was only two years previous to this, in the south of the county at Alveston on 27<sup>th</sup> July 1994 (I.Travers-Ayre). It was first taken in Britain at Westwell, Kent in 1951 (Scott) and quickly became established in the south of England. It reached Nottinghamshire (VC56) in 1991; South-east Yorkshire (VC61) in 1992 and South-west Yorkshire (VC63) in 1993. It was not until 1999 that I came across what I thought would be the first Cheshire record, whilst attending a light with EK & KM at Goytsclough Quarry SK011734 on 6<sup>th</sup> Aug. However, whilst looking through a selection of moths taken by DJP in his Prestbury SJ894769 garden, we came across two examples of *P. aeriferanus*, which David had caught on 12 & 25<sup>th</sup> July 1999. David later found an earlier specimen in his collection from 18<sup>th</sup> July 1995, which appears a more likely date for its first arrival into Cheshire. A further specimen was attracted to light at Mere SJ736813 during June 2000 (S.Blamire). It continues to spread and was taken for the first time in South Lancashire (VC59) on 26<sup>th</sup> June 1999 at Wigan Flashes SD5802 (R.Banks; PC-P; SMP ).

**S.H.Hind, County Micro-Moth Recorder**

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### **3. Butterflies**

Judging by comments received from contributors it would be easy to conclude that the year 2000 was fairly poor for butterflies, especially if judged by those insects frequenting gardens. One benefit of the Cheshire Butterfly Recording Scheme is, however, that with approximately 120 regular contributors it has, over recent years, been possible to make

meaningful comparisons from one year to another. Surprisingly, sightings in 2000 increased by 24% above the figures for 1999 and it may be that the excellent weather conditions of the mid-1990s have been responsible for raising our expectations to an unreasonable level.

Butterfly populations are never static and in any year some species will fare better or worse than others. The year 2000 proved to be no different in this respect with the Large Skipper, Small Copper, Holly Blue and Small Tortoiseshell all having poor breeding seasons. Only in the case of the Holly Blue was this predicted, as the downturn in its fortunes was part of a cyclical pattern. On the credit side, it was the best year since 1983 for the migrant Clouded Yellow. In addition, colonies of the White-letter Hairstreak were found at many new sites, mainly in the west of the county and reports indicated that the Comma had an excellent breeding season throughout Cheshire.

**Small Skipper** *Thymelicus sylvestris* (Poda) - Since the mid-1990s this species has been the most abundant and widespread Hesperiiidae in Cheshire. Numbers in 2000 were, however, below average at most sites, especially Pickering's Pasture where only a single butterfly was recorded. Peak numbers were seen in mid-July with a maximum count of 50 at Greasby on the 18<sup>th</sup>.

**Large Skipper** *Ochlodes venata* (Bremner & Grey) - It was another poor year for this insect, not helped by adverse weather conditions in late spring and early summer. The decline of the last few years can be illustrated by the number of sites recording daily counts of 10+ insects over the last five years – 1996 (29), 1997 (23), 1998 (4), 1999 (3) and 2000 (2). This year peak numbers occurred in late June with a maximum count of 85 at Greasby on 19<sup>th</sup> June.

**Dingy Skipper** *Erynnis tages* (L.) - This uncommon resident was again seen in good numbers at the two main breeding colonies on industrial waste in mid-Cheshire. Elsewhere in the county there was no change of status noted with smaller numbers seen at regular sites around Thurstaston, Inner Marsh Farm and Lea-by-Backford. For the second successive year maximum counts were recorded on 14<sup>th</sup> May - 23 at Weaver Valley Parkway and 28 at Ashton's Flash (Northwich).

**Clouded Yellow** *Colias croceus* (Geoff.) - As there had been no sightings of this irregular migrant in Cheshire during 1999 it was pleasing to note two influxes this year. The first occurred between 17<sup>th</sup> June and 22<sup>nd</sup> July when there were reports from 13 localities, including an observation of egg-laying along the Weaver Valley.

A second, and much larger influx, occurred between 11<sup>th</sup> August and 17<sup>th</sup> October with reports from 59 sites, including a maximum count of 18 at Meols on 25<sup>th</sup> August. There was evidence to suggest that some of these latter sightings related to locally bred insects, although others would have been recent immigrants as many were being recorded at coastal localities in southern counties during this same period.

In the past there have been few sightings of the female “*helice*” form of the Clouded Yellow, but this year there were records from both influxes - one at Saltney on 26<sup>th</sup> June,

Pickering's Pasture on 25<sup>th</sup> August, Marbury Country Park on 3<sup>rd</sup> September, Heswall on 13<sup>th</sup> September and Burton on 12<sup>th</sup> October. Interestingly, from the female taken at Saltney (and released later) 62 specimens were bred – 32 males and 30 females. All the females were of the “*helice*” form, whilst 6 of the males were pale creamy-yellow, approaching the colour of the females.

**Brimstone** *Gonepteryx rhamni* (L.) - Sightings followed a similar pattern to recent years with the majority of records emanating from breeding localities in the east of the county. There has, however, been a significant increase in sightings along the Mersey Valley, especially the Warrington and Widnes areas. The widespread planting of Alder Buckthorn, the larval foodplant of the Brimstone, is almost certainly responsible for some of these increases. Reports from the Wirral remain sparse with just single sightings at Brimstage and New Ferry.

**Large White** *Pieris brassicae* (L.) - A fairly average year for this double-brooded butterfly with widespread reports of small numbers during the spring emergence that peaked in mid-May. The second brood partially overlapped with the first brood, but was recorded in larger numbers, peaking in mid-August. Maximum daily count at any site was of 34 at Pickering's Pasture on 6<sup>th</sup> August.

**Small White** *Pieris rapae* (L.) - Sightings of this widespread and abundant resident were unexceptional during the spring brood. Larger numbers, especially at coastal localities on the Wirral, were seen during the summer emergence with the majority of sightings from mid-July to early September.

**Green-veined White** *Pieris napi* (L.) - This butterfly is the most widespread and abundant “white” in Cheshire, especially in the hilly areas in the east of the county. First brood figures were fairly average with hardly a discernible peak throughout the early months. As usual, the second emergence was seen in larger numbers with two distinct peaks in mid-July and mid-August. Highest daily count was at Swettenham Meadows where 90 were recorded on 27<sup>th</sup> July. Other sites with maximum daily counts of 30+ insects were Frodsham Marshes, Hale Head, Rostherne Mere, Danes Moss, Wildboarclough and Bradley Common.

**Orange Tip** *Anthocharis cardamines* (L.) - During the last few years the status of this common and widespread resident has remained largely unchanged. The loss of many traditional meadows on the Cheshire Plain has had some impact on numbers, but along river valleys and in less intensely farmed areas the Orange Tip still thrives. This insect is invariably single-brooded, but a report of a male at Upton-by-Chester on 22<sup>nd</sup> July was indicative of a second brood.

**Green Hairstreak** *Callophrys rubi* (L.) - As usual the majority of reports were from this species stronghold in the Pennine foothills, although colonies at these altitudes are often quite small. Maximum counts were from two lowland sites – 22 at Cranberry Moss on 13<sup>th</sup> May and 36 at Brookhouse Moss on the same date. Due to poor weather conditions there were hardly any sightings in April with peak numbers recorded later than normal in mid-

May. An unexpected sighting during this period was of a single worn specimen in a Prestbury garden on 14<sup>th</sup> May – possibly a windblown individual from the Pennine hills to the east of this site.

**Purple Hairstreak** *Quercusia quercus* (L.) - During the year the Purple Hairstreak was recorded from 31 tetrads, the majority in the west of Cheshire. Without the benefit of a specific survey it is difficult to assess whether this treetop butterfly has had a good year. Even in the east of the county this insect can, with careful searching, be found almost anywhere that oak trees grow. In the past seven years there have been reports from 24% of all tetrads in Cheshire. A sighting at Newgate on 11<sup>th</sup> September was the latest ever county record.

**White-letter Hairstreak** *Satyrium w-album* (Knoch) - It was an excellent year in Cheshire for this scarce and elusive butterfly. In the west of the county diligent searching, mainly by one contributor, revealed fifteen new sites – the majority of these sightings were in SJ37, but colonies were also found in SJ27, SJ46, SJ47 and SJ56. This year peak numbers were recorded slightly earlier than normal in the second week of July. A count of 8 individuals at a single locality at Mollington on 12<sup>th</sup> July was probably a county record. The White-letter Hairstreak has always been encountered less frequently in the eastern half of Cheshire and this year there was just a single sighting along Biddulph Way (Congleton).

**Small Copper** *Lycaena phlaeas* (L.) – The earliest sighting on record in Cheshire was at a warm sheltered locality at Heswall on 5<sup>th</sup> April. There was, however, little further good news with numbers depressingly low in the county for the fourth successive year. This insect has always been susceptible to adverse weather conditions, but its recent poor showing can be illustrated by the following statistics recording daily counts of 10+ at sites around the county – 1995 (65), 1996 (54), 1997 (11), 1998 (2), 1999 (2) and 2000 (1). The only locality showing a noticeable increase in numbers was New Ferry Butterfly Park where the improvement may have been the result of management work at the site. There was little evidence of a third brood, other than October sightings of single butterflies at Rostherne Mere and Newchurch Common.

**Silver-studded Blue** *Plebejus argus* (L.) - The colony that was introduced onto Thurstaston Common in 1994 decreased again this year with damp weather during the spring months being a likely cause of the decline. An added problem at this site over the past couple of years has been the damage caused to the heather by a plague of beetles. It would appear that the heather has now recovered and it is hoped that the butterfly colony will be able to expand over the next few years. This year there were maximum counts of only 4 insects on various dates between 28<sup>th</sup> June and 1<sup>st</sup> August.

**Common Blue** *Polyommatus icarus* (Rott.) - Still a widespread resident, but it now has a patchy distribution on the Cheshire Plain. During the year there was no significant improvement at most sites, although figures were a little better at the New Ferry Butterfly Park. The only sites recording counts of 30+ insects were Mouldsworth and Pickering's Pasture - even at this latter site numbers have fallen by more than 50% over the last three years.

**Holly Blue** *Celastrina argiolus* (L.) - The anticipated cyclical fall in numbers occurred in Cheshire during the year. Recent history has shown that these regular cycles occur one or two years later than in the more southerly counties and this has again proved to be the case. This year's reports indicate that the latest decline has been fairly evenly spread across the county with the species still being recorded in most areas, but in much lower numbers. The first brood peaked in early May and the second in early August.

**Red Admiral** *Vanessa atalanta* (L.) - It was a good year for this annual migrant with sightings steadily increasing from mid-June onwards. Peak numbers were achieved in September, followed by a gradual reduction until mid-October when weather conditions brought an abrupt end to the season. Despite the Red Admiral being recorded throughout the county there were very few localities where it was seen in double-figures. An earliest sighting at Bowers Brook (Widnes) on 18<sup>th</sup> March may have related to an individual that overwintered successfully.

**Painted Lady** *Cynthia cardui* (L.) - Migrants began arriving at coastal localities of southern England in early May and by the 14<sup>th</sup> the first sighting in Cheshire was reported from the Wirral. Numbers then increased slowly, but it was not until mid-June that there were widespread reports of small numbers throughout the county. From mid-August to mid-September there were further increases, although the only significant count was at Aldford where 47 were feeding on Marsh Ragwort on 11<sup>th</sup> August. Most other sites only recorded small numbers even though the insect could be found almost anywhere, including the Pennine foothills close to the Derbyshire border. Despite the slow start, the year 2000 turned out to be the best for this species since the massive invasion of 1996.

**Small Tortoiseshell** *Aglais urticae* (L.) - Normally an extremely common and widespread butterfly, although numbers have been much lower than expected since 1997. A single individual was flying in sunshine at Caldys Nature Park on 2<sup>nd</sup> January, but there were then few sightings until mid-March. Subsequent numbers remained below average and there appeared to be no imminent recovery as few larvae were noted in the spring with the earliest at New Ferry on 12<sup>th</sup> May. Emergence of the summer brood was noted from 7<sup>th</sup> July, although most observers commented on exceptionally low numbers. The second generation appeared in early September with some evidence to indicate a slight recovery. Largest count during this period was 40+ nectaring on a patch of Lucerne at Meols Common on 10<sup>th</sup> September.

**Camberwell Beauty** *Nymphalis antiopa* (L.) - A single butterfly observed in a garden at Wallasey on 8<sup>th</sup> August was the fourth year in the last six that this butterfly has been recorded in the county. As with most sightings of this rare immigrant the possibility that it originated from captive-bred stock cannot be totally discounted.

**Peacock** *Inachis io* (L.) - It was a fairly average year for sightings during the early months, but there were then conflicting reports regarding its fortunes in the breeding season. Most contributors felt that it had been a good year, although sites in South Wirral and Pickering's Pasture had disappointing results. Peak numbers were recorded in mid-August with impressive counts of 30 at Aldford on the 11<sup>th</sup>, 39 in a garden at Somerford on the 12<sup>th</sup>, 20

in a garden at Adlington on the 12<sup>th</sup> and 22 at Inner Marsh Farm on the 12<sup>th</sup>.

**Comma** *Polygonia c-album* (L.) - It was an excellent year for this common resident with many contributors commenting on increased numbers. At a few sites, including the New Ferry Butterfly Park, it was more numerous than either the Small Tortoiseshell or Peacock. A count of 15 at Bath Vale Meadow on 1<sup>st</sup> October was the largest concentration, whilst 11 at Pickering's Pasture on 20<sup>th</sup> July was the largest ever count for that site. Peak numbers were recorded later than normal in early October.

**Small Pearl-bordered Fritillary** *Boloria selene* (D. & S.) – This species emerged approximately one week earlier than normal at its last remaining site in Cheshire on private land at Bagmere. Sightings from the single brood were noted from 30<sup>th</sup> May to 6<sup>th</sup> July, with a maximum count of 19 on 16<sup>th</sup> June representing a small increase from the previous year. Management work to help conserve, and hopefully increase, the size of this colony under the Local Biodiversity Action Plan is to continue at this important site.

**Dark Green Fritillary** *Argynnis aglaja* (L.) - This butterfly has not bred in Cheshire since the 1940s and subsequent sightings have related to wanderers from surrounding counties. Sightings in the year 2000 were fairly typical with four reports of single insects - Anderton Lime Beds on 27<sup>th</sup> June, Houghton Green on 16<sup>th</sup> July, Thurstaston Common on 18<sup>th</sup> July and Wilmslow on 27<sup>th</sup> July.

**Speckled Wood** *Pararge aegeria* (L.) - Now a common and widespread resident with contributors again commenting on its abundance. In the Pennine foothills counts of 10+ were unknown in the past, but during the last two years have been recorded with increasing frequency. Maximum numbers in the county normally occur during the autumn months so a count of 100+ at a regularly worked site at Greasby on 19<sup>th</sup> June was exceptional.

**Wall** *Lasiommata megera* (L.) - It is known that populations of this insect undergo periodic fluctuations, but numbers have now remained extremely low since the early 1990s. There does not appear to be any satisfactory explanation as to why the Wall is faring so badly, although suggestions have included climatic change or habitat loss. Whilst these may be contributing factors it does not explain why this butterfly is still being recorded in good numbers in some other counties. There are still no areas in Cheshire where this butterfly cannot be found, but it is only thinly distributed throughout the county. Most frequent sightings occur in the Pennine foothills where modest increases were reported in 2000 – a maximum count of 19 at Moorside Quarry (Pott Shrigley) on 27<sup>th</sup> August was the first double-figure count in Cheshire since 1997.

**Grayling** *Hipparchia semele* (L.) - The only inland breeding colony in Cheshire at Sandbach Flashes appears to be thriving with a maximum count of 17 butterflies on 1<sup>st</sup> August. Good numbers were also recorded from the Wirral at Thurstaston and New Ferry. Unfortunately, there were no reports from other regular breeding sites along the Wirral coast, although this was probably due to a lack of recording rather than any change of status.

**Gatekeeper** *Pyronia tithonus* (L.) - The Gatekeeper enjoyed another good season, as it did throughout the 1990s. It is now found throughout the county with sightings again increasing in the hilly areas of eastern Cheshire, even reaching Wildboarclough. Peak numbers were recorded from late July to early August with a maximum count of 300 at Greasby on 5<sup>th</sup> August. An aberrant insect with “blind” ocelli on its upperwings was recorded at Pickering’s Pasture on 30<sup>th</sup> July, whilst an individual with extra eye-spots, known as the “*multiocellata*” form, was seen at Bollington on 20<sup>th</sup> August - it is worth looking out for these various forms as they are probably commoner than most observers realise.

**Meadow Brown** *Maniola jurtina* (L.) - This abundant and widespread insect had a successful breeding season at most sites. There was a maximum count of 300+ at Greasby on 26<sup>th</sup> June, 400+ at Heswall on 6<sup>th</sup> July and 597 at Handforth on 21<sup>st</sup> July, whilst a report from Pickering’s Pasture indicated another good year at that site. At most localities peak numbers were recorded in mid-July. Earliest sighting at Greasby on 10<sup>th</sup> June followed the pattern of the last five year’s when the emergence date in the county has been confined to the period between 9<sup>th</sup> – 13<sup>th</sup> June. Latest sighting at Anderton Nature Park on 30<sup>th</sup> September was later than normal.

**Ringlet** *Aphantopus hyperantus* (L.) - There were no confirmed breeding records of this insect in Cheshire between 1937 and 1996. The following year, however, a small colony was discovered in the Wych Valley with subsequent survey work revealing further colonies in adjacent areas. This year there was a maximum count of 30+ individuals on 19<sup>th</sup> July. The Ringlet prospers in seasons with intermittent cooler, wetter periods that may explain its success in the last few years.

**Small Heath** *Coenonympha pamphilus* (L.) - Formerly common and widespread, but has been declining significantly in the county for many years. Hopefully, it is only a lack of recording that has produced even fewer records this year with sightings on the Cheshire Plain confined to three localities – Waverton, Astbury Mere and Ashton’s Flash (Northwich). Elsewhere there were reports from seven sites on the Wirral and seven from the Pennine foothills. Maximum counts of 15 at Inner Marsh Farm on 30<sup>th</sup> May and 14 at Greasby on 26<sup>th</sup> June.

The database of the Cheshire Tetrad Recording Scheme now contains almost 100,000 records, which ensures we now have a far greater knowledge of the populations and distribution of butterflies in the county. Unfortunately, current data quickly becomes historical and it is important that the present momentum is maintained. Pressures on wildlife seem destined to increase in the foreseeable future and changes in distribution still need to be closely monitored. It would be appreciated if contributors would continue to send details of sightings to the County Recorder. All contributors will receive a free Annual Report.

**Barry T Shaw, County Butterfly Recorder**

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## 4. Macro-Moths

The year 2000 was a relatively poor one for macro-moths in Cheshire. Records of 306 species have been received which is well down on previous year's totals. This is probably a reflection of a lack of submitted records rather than a reflection of a decline in the county's fauna. If you have records for 2000 (or any other year!) which you have not yet submitted, please send them in to the new Cheshire Moth Group Data Officer, Shane Farrell, 15 Westover, Romiley, Stockport, Cheshire SK6 3ER. With the current plans to publish an atlas of lepidoptera in Cheshire, *your records really do count and really are appreciated.* Hopefully, with your help, the 2001 report on can provide a far more complete picture of the county's macro-moths.

**Early Season Moths:** We have relatively few records of even quite common early season moths. Yellow Horned, *Achyla flavicornis*, and Spring Usher, *Agriopis leucophaeria*, were both recorded at only two sites – Mouldsworth (IEL) and Mere (SB). This is due to a lack of recording effort at the relevant time of the year; Spring Usher regularly emerges in mid January, and hence is easily missed. Other early season records of note include a single observation of Tawny Pinion, *Lithophane semibrunnea*, at Styal in March (AWG) and an Orange Underwing, *Archiearis parthenias*, at Congleton Edge in April (JHS). April also saw the only report of Belted Beauty, *Lycia zonaria*, from its stronghold on the Wirral (AW).

**The Summer Months:** May, as usual, saw the first emergence of a number of summer moths, including a Beautiful Yellow Underwing, *Anarta myrtilli*, at Heswall on the Wirral (SJM). Mother Shipton, *Callistege mi*, was reported at Ashton's Flash (AWG), and a single example of the notable B Alder Kitten, *Furcula bicuspis*, appeared at Mere (SB). In June, a single Poplar Kitten, *Furcula bifida*, appeared in Stockport (EK), our only record for the current year. The month saw a number of other good records including a Tawny Shears, *Hadena perplexa*, on the Wirral (ES), and a number of the notable B Grass Wave, *Perconia strigillaria*, reported from their stronghold at Little Budworth Country Park (AW). Two records of the local Netted Pug, *Eupithecia venosata*, one each in Warrington (DS) and Stockport (SF) were also interesting records. The month also saw the first arrival of migrants including Hummingbird Hawk-moth, *Macroglossum stellatarum*, at Willington (RW) and the first of 149 records of Silver Y, *Autographa gamma*. This specie continued to be seen regularly into September.

In July a further Hummingbird Hawk-moth, *Macroglossum stellatarum*, appeared at Congleton (JHS), and a Cheshire Moth Group event at Haystack Lodge resulted in the capture of a single Dark Sword-grass, *Agrotis ipsilon*. This meeting also produced our only record of Six-spot Burnet, *Zygaena filipendulae*. Two examples of the Leopard Moth, *Zeuzera pyrina*, were caught, one at Mere (SB) and the second in Stockport (EK). A single Blackneck, *Lygephila pastinum*, was also seen in this later area (SF). This is the second VC58 record following on from the first in 1986. Mere continued to attract good moths with two examples of The Olive, *Ipimorpha subtusa*, (SB). A single Scarce Silver-lines, *Bena prasinana*, graced a Cheshire Moth Group event at Little Budworth (AW). The month also saw a single Scarce Footman, *Eilema complana*, the second VC58 record, in a garden trap in Weaverham (AW). The first record was a single in Prestbury in 1976. A single

Brown-line Bright-eye, *Mythimna conigera*, was seen on the Wirral (ES) and a Gold Spangle, *Autographa bractea*, appeared in Stockport (SF).

After the excitement of July, with two second records for the county, good moths continued to be reported in August. A single Blue-bordered Carpet, *Plemyria rubiginata*, was seen at Styal (AWG). A Barred Chestnut, *Diarsia dahlii*, appeared at Mere (SB) and a migrant Vestal, *Rhodometra sacraria*, was seen in Birkenhead (GJ). Sandhill Rustics, *Leperina nickerlii gueneei*, were reported from the specie's only VC58 site on the Wirral on two occasions (GJ,AW), and observers searching for this moth also recorded Vestal, *Rhodometra sacraria*, (GJ,AW), Oblique Carpet, *Orthonama vittata*, Haworth's Minor, *Celaena haworthii*, (both GJ) and Archer's Dart, *Agrotis vestigialis*, (AW). While Archer's Dart, *Agrotis vestigialis*, was expected at a coastal site, the record of Haworth's Minor, *Celaena haworthii*, more usually associated with upland moors is very interesting and suggestive of a possible migrant.

**Autumn and Winter:** In September a Pinion-streaked Snout, *Schrankia costaestrigalis*, appeared at Mere (SB). This small macro may easily be overlooked as a micro by observers unfamiliar with the specie. The month also saw our only record for the period of Garden Dart, *Euxoa nigricans*, at Alderley Edge (CR). Strangely we have also only received two reports of Merveille du Jour, *Dichonia aprilina*, (Mere (SB) and Stockport (SF)) and a single record of Frosted Orange, *Gortyna flavago*, (found in a toilet block at the Daresbury Laboratory (AW)). These records were in September. October saw reports of two unusual carpets, a Pine Carpet, *Thera firmata*, at Mere and the notable B Juniper Carpet, *Thera juniperata*, at Styal (AWG) and Stockport (SF). Records of early season moths were dominated by reports from Mouldsworth (IEL) and Mere (SB). This proved equally true of late season moths, with these two sites yielding most of our records for 2000 of December Moth, *Poecilocampa populi*, although this specie also appeared in Stockport (SF). Winter Moth, *Operophtera brumata*, records proved far more wide spread, perhaps because of this insect's attraction for lighted windows!

Clearly, 2000 was an exciting year for macro-moths in the county despite the low numbers of records received. The report highlights a number of significant records, including two second records for VC58. If you have records that can help us to complete the picture of the macro-moths of Cheshire in 2000, please let us know. Hopefully all recorders will let us have their records for 2001 a.s.a.p. so that the next report can be as comprehensive and complete as possible.

Records highlighted in the text were received from: AW – A Wander, AWG – AW Gradwell, CR – C Rutherford, DS – D Spencer, EK – E Kearns, ES – E Samuels, GJ – G Jones, IEL – IE Landucci, JHS – JH Swan, RW – R Wye, SB – S Blamire, SF – S Farrell, SJM – SJ McWilliam.

**Adrian Wander, CMG Newsletter Editor and  
Steve McWilliam, County Macro-Moth Recorder**

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## 5. The Cheshire Lepidoptera Atlas

Just under twenty people attended a meeting of the Cheshire Moth Group (CMG) at Risley Moss in autumn 2001 to discuss the proposed Moth Atlas project. Everyone present agreed that the time was right to produce an updated account of the Lepidoptera of the County, by which we mean VC58. The last account of the county's macro moths was published in 1994, and has proved to be an invaluable resource for moth trappers in the county ever since.

One of the frequently asked questions about the Cheshire Moth Group and the Atlas project is our relationship with the Lancashire and Cheshire Entomological Society (LCES). It was unanimously agreed that the Cheshire Moth Group would now be affiliated to the LCES. They will be fully supporting the Group and the Atlas Project. It was also agreed that the group should have a formal structure and the following posts were filled:

- Paul Hill as Chairman
- Shane Farrell as Data Manager
- Adrian Wander as Newsletter Officer

The three existing County recorders (Steve McWilliam for Macros, Steve Hind for Micros and Barry Shaw for Butterflies) will, of course, continue with their roles.

The task of compiling a County Lepifauna is by no means an easy one, especially when you consider that we intend to include all Lepidoptera - butterflies macro and micro moths. The target date for publication is five years time. This will allow us four years to undertake (note I do not say complete) the enormous amount of survey work that will be needed, and a year to prepare the Atlas.

'Atlas' is perhaps an unfair title, as it is unlikely that we will map every species. Given the ambitious nature of the project, and the rather severe space limitations we are liable to face, maps will not be provided if an adequate description of the range can be written. This will probably apply for the very widespread species such as Large Yellow Underwing and also our rarer more localised specialist species such as Sandhill Rustic and Belted Beauty. However, the decision on what, exactly, will be mapped has been postponed until we have the data!

One of our first tasks is to find out what information we already have. Steve McWilliam holds lot of data on Recorder, whilst latterly many members of the Group have been inputting their data into Mapmate. In addition many recorders have supplied paper copies of their notes which will also be fed in to the database for collation and mapping. Even before we have started the recording in earnest, potential new species for the county are turning up. Elsewhere in this issue are accounts of two new micros, while corresponding about the Atlas Project has unearthed a record of Large Thorn on Merseyside last year and Beautiful Hook-tip from the Wales/Cheshire border. Obviously the records remain to be verified, as they have yet to be submitted, but it goes to show that there is probably a whole wealth of data just waiting to be put to good use.

Updates on the Atlas progress will appear in the Cheshire Moth Group newsletter, and in these annual reports as well as on the soon to be launched Cheshire Moth Group website and via the nwmths discussion group.

The recording efforts over the next four years present us with an exciting challenge. Lots of moth trapping sessions with lights and sugar are planned and hopefully you will come along and join in with the fun! In addition, there will be opportunities to take part in various training days: larval work (beating and sweeping detailed in this newsletter), leaf mining (planned for next autumn) and a course on dissections and genitalia identification (date to be announced). If there is a skill you would like to learn then let us know. There is almost certainly some one within the group who can arrange a training session. There will also be plenty of opportunity for those of us who haven't already done so, to broaden our horizons beyond the Macro's as well.

If you have any questions about the Atlas project let us know and we'll do our best to answer your queries.

**Paul Hill, CMG Chairman**

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## **6. Moth Recording in Cheshire**

In order to ensure the accuracy and validity of Cheshire Moth records it is suggested that we should all use the following protocols where possible. However, if recorders have insufficient time to comply with these requests please send in your records any way. We would rather receive a simple species list for a given year at a given site than no data at all.

The four essential items that are requested for all submitted moth records are;

1. The name of the species recorded. Scientific names are acceptable for all species. Common names may be used for the macro-lepidoptera. Common names for most micro-lepidoptera are not commonly used so it is preferred if these are avoided.
2. The date on which the species was recorded. For light trap records the date should refer to the night on which the trap was turned on. E.g. a trap is run overnight from the 19<sup>th</sup>-20<sup>th</sup> October. All records should be submitted as referring to the 19<sup>th</sup>.
3. The name of the recorder and contact details (eg address, telephone number, email address)
4. The grid reference at which the record was made (at least 4 figure, preferably 6 figure) along with a site name. Ordnance Survey maps give instructions on how to work out grid references. For daylight observations a 4 figure reference may be more logical. For fixed survey positions (such as light traps) a 6 figure reference is preferred.

This information will enable us to plot distribution maps for species, establish flight periods and to check back with the recorder if there are any queries regarding the record.

Other information is also very useful and should be supplied if possible:

1. The stage of the insect (e.g. larva, adult, pupae or ova)
2. The method used (e.g. MV trap, actinic trap, sugar, leaf mine, searching etc).
3. Numbers of each species recorded .
4. Who determined the species identification if different to the recorder.
5. For certain species requiring examination of the genitalia observers should indicate if this was performed and by whom.
6. A habitat description of the site recorded .

Note: much of this information only needs to be submitted once. Once we have the details of a recorder and site in the database, subsequent records from the same site need not repeat the information, unless any details have changed.

Submitted records in the form of species lists for sites and dates are simpler to enter into the computer than lists of sites and dates for individual species. It also helps data entry if the species lists are sorted alphabetically or by Bradley & Fletcher number.

A new recording form has been prepared (and is attached) to simplify the task of recording species. In future it is requested that all moth records should be sent to the Data Officer for the Cheshire Moth Group:

Shane Farrell, 15 Westover, Romiley, Stockport, Cheshire SK6 3ER

They will then be entered into the system and passed to the rECORd centre for long term storage and archival.

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## **7. The Cheshire Moth Panel and Validation of Cheshire Moth Records**

A Cheshire Moth Panel (CMP) has now been established to ensure that data entered into the 'official record' is as accurate as possible. The panel's purpose will be to validate and accept/query records that are received by the County Moth Recorders. The intention behind the formation of the panel is to ensure that the Cheshire moth records we hold can be trusted as a reliable source of information by future generations. It is intended that in the normal run of things the panel will meet twice in the early part of the year to validate records received over the previous year. The members of the panel will not be experts in all moth matters and will consult people outside the panel for expertise and comments where required. The initial composition of the panel is Steve McWilliam, Steve Hind, Adrian Wander, and Kevin McCabe.

All the moth species have been split into 4 main categories. Attached is a draft recording form that will be made as widely available as possible. A box is provided for recorders to either tick or enter a number of individuals. In addition, the form provides details of the status of each species. This will provide recorders with information regarding the level of detail that may be required for each species at the time of observation. Recorders will then be aware of which records are likely to be queried and should preferably retain voucher specimens of the species where required. Moth records should be submitted to the new Moth Group Data Officer (Shane Farrell [shane.farrell@ntlworld.com](mailto:shane.farrell@ntlworld.com)). The records will then be entered and passed to the CMP who will then contact observers if further information (or voucher specimens) need to be submitted. Where possible, specimens that may require verification should be retained in the fridge and one of the panel should be contacted. We will then try to view the live specimen as soon as possible. Contact details are provided at the end of these notes.

The following outlines the categories that have been set up with some explanation of each category. Records of moth species falling into categories 1 and 2 will normally be accepted without validation by the CMP whereas records of moth species falling into categories 3 and 4 will be vetted by the CMP at their annual meeting and confirmation of these records may be sought.

## **Categories of Moths for Recording Purposes**

### **Category 1**

This category includes macro-moths that are widespread and abundant, are readily identifiable and already on the Cheshire Checklist. Simply noting the presence of the species on the given date will suffice (although numbers are preferred if possible). Examples include Large Yellow Underwing, Heart and Dart, Light Emerald and Common Carpet.

### **Category 2**

This category includes macro-moths which although they may be readily identified and already be on the Cheshire Checklist are of restricted distribution or occurrence so we would like to collect as much information about them as possible. We would like to know numbers recorded and who determined the species. This category also includes all but the most common of migrants.

### **Category 3**

This category covers moths that are not readily identifiable and may be confused with other species. This category also includes species that are on the Cheshire Checklist but are scarce enough for the CMP to want to monitor the records that we receive. This notably includes rare moths which may be easily confused with commoner species. Records of some of these species as adults will need to indicate that the genitalia has been examined (eg Dark Dagger to distinguish from Grey Dagger). In this case a G is appended to the status number. For those unable or unwilling to do genitalia preps or to hold voucher specimens for checking, records may be sent in as aggregates (e.g. Grey/Dark Dagger, Common/Lesser Rustic).

### **Category 4**

This category basically covers everything else! Moths which are not on the current Cheshire Checklist plus a few on the Checklist for which we have only a single or a few records. The species may be hard or easy to identify, localised or rare. Voucher specimens will nearly always be required for the acceptance of these records although high quality photographs may suffice in some instances.

## **Contact Details for the Moth Panel**

Steve McWilliam, Chester Zoological Gardens, Upton, Chester, Cheshire, CH2 1LH Tel: 01244 383569

Steve Hind, 32 Carleton Road, Higher Poynton, Stockport, Cheshire. SK12 1TL. Tel: 01625-859504

Adrian Wander, 16 Bramhall's Park, Anderton, Northwich, Cheshire, CW9 6AH. Tel: 01606 783371

Kevin McCabe, 29 Reigate Road, Flixton, Greater Manchester, M41 6PT Tel: 0161 7486429

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## 8. A Note from the Data Manager

I would, first of all, like to thank anyone and everyone that has sent or is going to send records in to the CMG. As stated in the introduction, *your records really do count and really are appreciated.*

This has never been more important than right now. We are in the early stages of creating a new atlas for all species in VC58 and every record we receive will go towards making this the success we all hope it will be. We can receive records in any format whatsoever, be that paper based, electronic (please note my email address [shane.farrell@ntlworld.com](mailto:shane.farrell@ntlworld.com)) or even verbal. However, the biggest single contribution that recorders can make is to use the recording program that many of the Cheshire recorders are already using – Mapmate.

This program is the one upon which the records for the atlas will be maintained and entered and the main reasons for this are as follows:

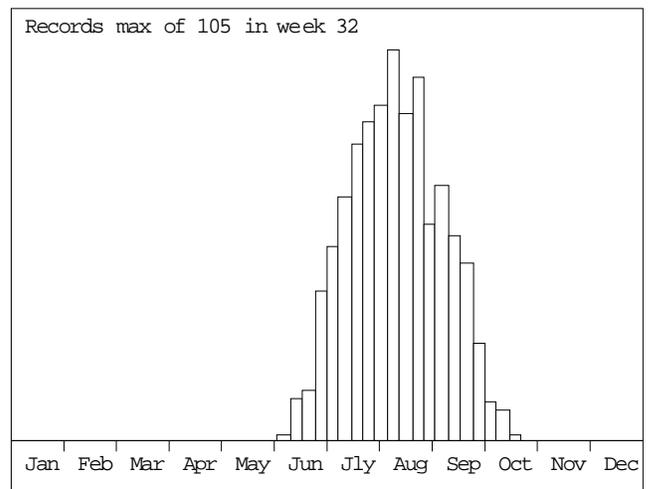
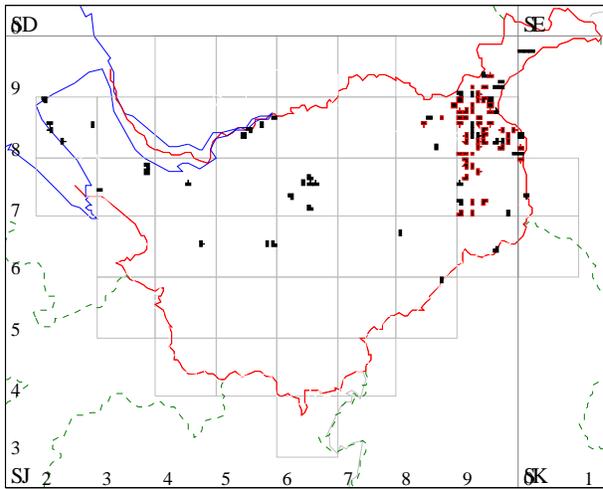
- Records are entered by the recorder themselves and can only be altered by them
- Records are entered quickly and easily
- The ease and variation of the retrieval of information is superb
- Reports and summaries can be produced at the touch of a button for county, recorder, site, date – the possibilities are almost endless
- Maps and flight period charts (see examples below) can be produced with amazing simplicity
- Recording data can be exchanged VERY easily between recorders
- The exchange of records is an effective ‘back-up’ of your own records
- In addition you can ‘back up’ your records to the Mapmate server

This exchange of data means that you can obtain the whole database, just maintain your own records or do a combination of the two. The fact that recorders are entering their own data means that the load is shared and this means that the problems experienced in the past with a lack of response from County Recorders should be just that – a thing of the past! In fairness though, this has been due to a lack of time – imagine having thousands of records to enter, assess and sort each year!

The quality of the maps is excellent and to top it all, the program is only £10 (with free upgrades off the website). Please take the time to have a look at this option as it will not only help ‘the cause’ but will also mean that your own data will be both more easily entered and the retrieval of reports and summaries will be made so much easier.

Further details can be obtained from the website [www.mapmate.co.uk](http://www.mapmate.co.uk) or you can send a cheque or P.O. for £10 (payable to Teknica Ltd.) to: Teknica Limited, The White House, Montacute Road, Stoke Sub-Hamdon, Somerset, TA14 6UQ : Remember to enclose your Name and Delivery Address.

2107 Large Yellow Underwing (*Noctua pronuba*)



Example of a Map created automatically by Mapmate Dots are updated when records are entered and by clicking on the dots you can trace the records back and obtain details retrospectively.

Example of a 'periodicity graph' created by Mapmate from records on the system. This again updates itself from the records as they are added.

Finally, please do not take this 'hard selling' of Mapmate to mean that records not in this form are of any less value. It is essential that all records are sent in and I assure you they will all be permanent and valued additions to the data already to hand.

**Shane Farrell, CMG Data Officer**